

REMARKS

This paper is filed in response to the *Office Action* mailed September 22, 2006.

Claims 61-66 are pending in this application. Claims 61-62 and 64-66 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 6,047,356 to Anderson *et al.* (hereinafter referred to as "Anderson"). Claim 63 is objected to for being dependent upon a rejected base claim.

The rejection of the claims is respectfully traversed. Reconsideration is respectfully requested in light of the remarks below.

Claims 61-62 and 64-66 – § 103(a)

The rejection of claims 61-62 and 64-66 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Anderson is respectfully traversed.

To establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), the combined references must teach or suggest each and every element of the claim. *See* M.P.E.P. § 2142.

I. Determining whether a device memory can store an effect by examining a representation of said device memory.

Anderson does not teach or suggest "code for determining whether said haptic feedback device memory can store said haptic effect by examining said representation of said haptic feedback device memory," as recited in claim 61. Anderson appears to disclose a standard method for caching. For example, in column 2, lines 9-12, Anderson recites that "a primary object of the present invention is to provide a cooperative client-side and server-side file caching method." Anderson's methods for caching are not the same as determining whether a device memory can store a haptic effect.

Generally, a "cache" is defined as a special memory subsystem in which frequently used data values are duplicated for quick access. *See, e.g., Microsoft Computer Dictionary, Fifth Edition.* Microsoft Press (2002). Anderson describes the process of caching as: "large chunks of data may be read from the disk to RAM memory under the assumption that portions of, or near

to, the data presently accessed have a high likelihood of being accessed in the near future.” *See Anderson, column 1, lines 26-29.* On page 3 of the *Office Action*, the Examiner references one method of file caching disclosed in Anderson:

“A method of the present invention for caching file reads by a client from a network file server includes providing caches on both the server and the client, the server cache reading the data in mass storage device allocation units, remainders of files, or whole caches, whichever is less, and the client cache storing the data in multiples of cache blocks. Sufficient cache blocks are read ahead into the client cache to keep the server cache one mass storage device access ahead of the data currently read by the client application.” *See Anderson, column 3, lines 17-26.*

This method and other methods of caching disclosed in Anderson do not teach or suggest “determining whether a haptic feedback device memory can store a haptic effect.”

In one described embodiment of the present invention, a host computer may have “knowledge and control over force effects in the [haptic feedback] device memory.” *See Abstract.* Such knowledge and control is used by the host computer to determine whether the device memory can store a force effect. For example, in one embodiment, “[a] representation of the device memory is preferably maintained in host computer memory to allow the host computer to efficiently determine when effects can be loaded in device memory.” *See paragraph 16.* The host computer maintains the model or representation of the device memory so that the host computer “knows exactly when an effect can be downloaded to and stored by the [haptic feedback] device and when there is not sufficient memory on the [haptic feedback] device to store a particular effect.” *See paragraph 77.*

Thus, merely storing data in RAM memory under the assumption that the data may be accessed in the future is not the same as “examining a representation of a device memory to determine whether the device memory can store a force effect,” as claimed in claim 61.

II. Creating a representation of a haptic feedback device memory in a computer memory.

Further, Anderson does not teach or suggest “creating a representation of a haptic feedback device memory in a computer memory,” as recited in claim 61. Anderson describes a “distributed file system.” *See Anderson, column 2, lines 31-32.* Furthermore, on page 6 of the *Office Action*, the Examiner notes that Anderson teaches “at least one node of the system

operates as a sever providing network access to files on a local disk, and at the same time operates as a client on behalf of a host computer to which it is attached via a bus interface." *See* Anderson column 2 lines 32-35. The Examiner continues: "the acting as a server in which the server is known as the network node where the disk is located is equivalent to the creating of a representation of a haptic feedback device in a computer memory." *Id.* Respectfully, acting as a server in a distributed file system is not equivalent to "creating the representation of a haptic feedback device memory."

Generally, a "server" is defined as a computer or program that responds to commands from a client. *See, e.g., Microsoft Computer Dictionary, Fifth Edition*, Microsoft Press (2002). In the background, Anderson describes a server as a network node interfaced to a mass storage device, the server capable of responding to read access requests and write access requests from a client. *See* Anderson, column 1, lines 9-22. A "distributed file system" is defined as a file management system in which files may be located on multiple computers connected over a local or wide area network. *See, e.g., Microsoft Computer Dictionary, Fifth Edition*, Microsoft Press (2002). Responding to read and write commands from a client or locating files on multiple computers is not the same as "creating a representation of a haptic feedback device memory in a computer memory."

In one described embodiment of the present invention, "[a] representation of device memory is created, where the device memory is provided on the force feedback device, and the representation is allocated in memory of the host computer." *See* page 2, paragraph 11. The representation, or model of the device memory may be created "using information from the device." *See* page 9, paragraph 83. For example, "the device can send the host [computer] information such as the size of memory and number of effects that can be stored." *Id.* The representation may or may not contain the actual data stored on the device memory: "the host can store in its memory model either the actual data for the effect, or only the location and size of the portion of memory space that the effect occupies." *See* page 10, paragraph 91.

Thus, the server node of Anderson which may read and write files in a distributed file system does not teach or suggest "creating a representation of a haptic feedback device memory," as recited in claim 61.

III. Conclusion.

Because Anderson does not teach or suggest code for “determining whether said haptic feedback device memory can store said haptic effect by examining said representation of said haptic feedback device memory” or “creating a representation of a device memory in computer memory” as recited in claim 61, claim 61 is patentable over Anderson.

Because claims 62 and 64-66 depend from and further limit claim 61, claims 62 and 64-66 are patentable over Anderson for at least the same reasons as claim 61. Therefore, Applicant respectfully requests the Examiner withdraw the rejection of claims 61-62 and 64-66.

Claim 63 – Objection

Claim 63 stands objected to as being dependent on rejected independent claim 61 but would be allowable if rewritten in independent form. Applicant appreciates the allowance of claim 63. However, in light of the remarks above, Applicant respectfully asserts that claim 61 is allowable. Thus, claim 63 depends from an allowable base claim and is in condition for allowance. Therefore, Applicant respectfully requests the Examiner withdraw the objection to claim 63.

CONCLUSION

Applicant respectfully asserts that in view of the remarks above, all pending claims are allowable and Applicant respectfully requests the allowance of all claims.

Should the Examiner have any comments, questions, or suggestions of a nature necessary to expedite the prosecution of the application, or to place the case in condition for allowance, the Examiner is courteously requested to telephone the undersigned at the number listed below.

Respectfully submitted,


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